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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,465	01/22/2004	Kiyonori Moroto	2018-833	4389

23117 7590 06/28/2005

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EXAMINER

LE, DANG D

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,465

Applicant(s)

MOROTO ET AL.

Examiner

Dang D. Le

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
 4a) Of the above claim(s) 18-26 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-17 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 1/22/04.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-17 in the reply filed on 5/20/05 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakuma et al. (5,296,771).

Regarding claim 1, Sakuma et al. shows a motor comprising:

- a permanent magnet (2) formed from a plurality of magnetically differing poles disposed in an alternating and circumferential fashion;
- an armature (3) rotatably disposed within an inner circumference of the permanent magnet, the armature having coils wound thereabout; and
- a commutator (4) comprising a plurality of segments disposed in a direction of rotation and electrically connected to the coils (14) wound around the armature, the segments mutually adjacent in the direction of rotation and being mutually insulated;

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- a brush (7) successively contacting each of the segments due to rotation of the armature; and
- a capacitor (13, Figure 4) electrically connected to a circuit including the commutator and the armature, wherein the capacitor stores electromagnetic energy released by the coils during rotation of the armature to prevent occurrence of discharge between the brush and the segments.

Regarding claims 3 and 15-17, it is noted that Sakuma et al. also shows all of the limitations of the claimed invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al. in view of Zepp et al. (6,880,229).

Regarding claims 2 and 11, Sakuma et al. shows all of the limitations of the claimed invention except for a center core; and an outer core, wherein the center core and the outer core are joined by a joint such that when successive outer cores are joined to the center core, the coil, when wound, forms a trapezoidal shape.

Zepp et al. shows a center core (2'); and an outer core (10'), wherein the center core and the outer core are joined by a joint such that when successive outer cores are joined to the center core, the coil, when wound, forms a trapezoidal shape for the purpose of allowing inserting of pre-wound coils.

Since Sakuma et al. and Zepp et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the armature with a center core; and an outer core, wherein the center core and the outer core are joined by a joint such that when successive outer cores are joined to the center core, the coil, when wound, forms a trapezoidal shape as taught by Zepp et al. for the purpose discussed above.

7. Claims 4-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al. in view of Horski et al.

Regarding claim 4, Sakuma et al. shows all of the limitations of the claimed invention except for the capacitor being disposed in the commutator.

Horski et al. shows the capacitor (122) being disposed in the commutator for the purpose of allowing more space in the armature.

Since Sakuma et al. and Horski et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to dispose the capacitor in the commutator as taught by Horski et al. for the purpose discussed above.

Regarding claims 6-9 and 12, it is noted that Sakuma et al. and Horski et al. also shows all of the limitations of the claimed invention.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al. in view of Horski et al. and further in view of Chiba et al. (5,266,860).

Regarding claim 10, the motor of Sakuma et al. modified by Horski et al. shows all of the limitations of the claimed invention except for insert molding.

Chiba et al. shows insert molding for the purpose of reducing electric noise.

Since Sakuma et al., Horski et al., and Chiba et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use insert molding as taught by Chiba et al. for the purpose discussed above.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al.

Regarding claim 13, Sakuma et al. shows all of the limitations of the claimed invention except for capacity of the capacitors between $0.02 * O * P$ and $0.2 * O * P$.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to set capacity of the capacitors between $0.02 * O * P$ and $0.2 * O * P$, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al. in view of Kemmner (4,566,866).

Regarding claim 14, Sakuma et al. shows all of the limitations of the claimed invention except for the pump portion.

Kemmner shows the pump portion for the purpose of making a fuel pump.

Since Sakuma et al. and Kemmner are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a pump portion as taught by Kemmner for the purpose discussed above.

Information on How to Contact USPTO

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D. Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/19/05

A handwritten signature in black ink, appearing to read 'Dang Le', is positioned above the printed name and title.

DANG LE
PRIMARY EXAMINER